



**istanbul matematiksel bilimler merkezi**  
**istanbul center for mathematical sciences**

# MINIMAL SURFACES

Jens Hoppe

## **Abstract**

Minimal (hyper-)surfaces in Euclidean as well as in Minkowski-space(s), and in spheres, will be presented. Particular topics to be covered are, geodesics, Lagrange's graph equation for minimal surfaces in  $\mathbb{R}^3$ , the (axially symmetric) catenoid, the helicoid, isothermal coordinates, embedding functions of minimal surfaces as harmonics functions, Weisstrass representation, Enneper surface, separation of variable approach to level set equation, Scherk's surface(s), Minimal surfaces in Minkowski space (including singularity formation, rotating and pulsating solutions) and in spheres, new solution-generating techniques.

**Date :** Monday, November 21, 2016 - Friday, November 25, 2016 - Monday, November 28, 2016

**Time:** 13:30

**Place:** IMBM Seminar Room, Boğaziçi University South Campus